# SMALL VISION MODULE FOR REALTIME STEREO AND MOTION ANALYSIS

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## ABSTRACT

A compact, inexpensive, real-time device for computing dense stereo range
10     and motion field images, which are fundamental measurements supporting a
wide range of computer vision systems that interact with the real world,
where objects move through three-dimensional space includes a novel
algorithm for image-to-image comparison that requires less storage and
fewer operations than other algorithms. A combination of standard, low-cost
15     and low-power components are programmed to perform algorithm and
performs realtime stereo and motion analysis on passive video images,
including image capture, digitization, stereo and/or motion processing, and
transmission of results.